

APPLICANT(S): Shukla, et al.  
SERIAL NO.: 10/069,280  
FILED: July 24, 2002  
Page 7

### **REMARKS**

Claims 1, 2, 11-16 and 18-37 are pending in the application. Claims 1, 2, 11-16 and 18-37 have been rejected. Claims 1, 2, 11, 19, 20, 23, 24 and 29 have been amended. The amendments to the specification, claims and the incorporation of new claims are editorial in nature and contain no new matter. Therefore, Applicants respectfully request entry of the Amendment.

### **CLAIM OBJECTIONS**

In the Office Action, the Examiner objected to Claim 2 as being designated "currently amended", when no new amendments have been entered for the claim. Applicants have accordingly designated the claim as "previously amended", and request entry of the amendment. The Examiner also objected to the designation of claim 20 as "previously amended" when the claim should have been designated "currently amended". Applicants have thus corrected the status identifier, and accordingly request that the Examiner withdraw her objection.

### **CLAIM REJECTIONS - 35 U.S.C. § 112 FIRST PARAGRAPH**

In the Office Action, the Examiner noted that reference in claims to "heparin sulfate" substrates and products as lacking support in the specification. Applicants submit that the reference to "heparin sulfate" is a typographical error, and have amended claims 1, 23 and 24 to refer to "heparan sulfate". Accordingly, Applicants request withdrawal of the rejection.

### **CLAIM REJECTIONS - 35 U.S.C. § 112 SECOND PARAGRAPH**

In the Office Action, the Examiner asserted that claims 1, 2, 11-16 and 18-24 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the

APPLICANT(S): Shukla, et al.  
SERIAL NO.: 10/069,280  
FILED: July 24, 2002  
Page 8

invention, by referring to a polysaccharide preparation which is "enriched for 3-O sulfated glucosamine residues".

Applicants maintain that the claims referring to polysaccharide preparations enriched for 3-O sulfated glucosamine residues is definite, and, as noted in Applicants previous response is supported in the specification, at page 5, lines 9-13 as being enriched by, in fact at least 1%, with description of 5 % enrichment, as well. Applicants have herein amended claims 1, 23 and 24 to refer to preparations enriched by at least 5%, and accordingly request withdrawal of the rejection.

Applicants have also amended claims 19 and 29 to include a period at the end of each claim, and have amended claim 29 to refer to a trisaccharide, rendering these claims definite. Accordingly, Applicants request withdrawal of the rejection.

#### **CLAIM REJECTIONS - 35 U.S.C. § 102**

In the Office Action, the Examiner rejected claims 1, 2, 11, 12, 20, 24-27 and 35 under 35 U.S.C. § 102(b), as allegedly being anticipated by Lukas or Larm, in view of Lindhal et al, as support for inherency.

Applicants respectfully disagree. Applicants have herein amended the claims to refer to heparan sulfate preparations enriched by at least 5 %, for 3-O sulfated glucosamine residues, and submit that Lindhal is not an appropriate reference therefore for supporting inherency. Applicants maintain that neither Lukas nor Lindhal disclose compositions comprising heparan sulfate preparations enriched by at least 5 %, for 3-O sulfated glucosamine residues, or their use in inhibiting HSV infection.

Accordingly, Applicants respectfully request withdrawal of the rejection.

#### **CLAIM REJECTIONS - 35 U.S.C. § 103**

APPLICANT(S): Shukla, et al.  
SERIAL NO.: 10/069,280  
FILED: July 24, 2002  
Page 9

In the Office Action, the Examiner rejected claims 1, 2, 11, 12, 20-22, 24-27 and 35 – 37 as being rendered obvious in view of Lukas et al.

Applicants respectfully disagree. It would not be obvious to one skilled in the art, based on Lukas et al that there is a difference between the use of 3-OST enzymes to generate sulfated heparan polysaccharides, for treating HSV infection. Applicants have demonstrated the unexpected finding that 3-OST-3 sulfation provides for a polysaccharide product which substantially inhibits HSV infection.

Lukas et al describes the use of heparin to inhibit Herpes virus infection, however use of heparin alone, without zinc did not appreciably inhibit HSV infection. Thus, Lukas does not disclose the efficacy of heparin in inhibiting HSV infection, and certainly does not disclose, nor render obvious, the use of heparan sulfate polysaccharides enriched for 3-O-glucosamine residues for inhibiting HSV infection. Accordingly, Applicants request withdrawal of the rejection.

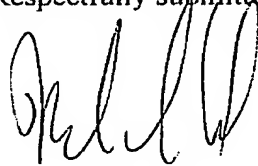
In view of the foregoing amendments and remarks, the pending claims are deemed to be allowable. Their favorable reconsideration and allowance is respectfully requested.

Should the Examiner have any question or comment as to the form, content or entry of this Amendment, the Examiner is requested to contact the undersigned at the telephone number below. Similarly, if there are any further issues yet to be resolved to advance the prosecution of this application to issue, the Examiner is requested to telephone the undersigned counsel.

APPLICANT(S): Shukla, et al.  
SERIAL NO.: 10/069,280  
FILED: July 24, 2002  
Page 10

Please charge any fees associated with this paper to deposit account No. 05-0649.

Respectfully submitted,



---

Mark S. Cohen  
Attorney for Applicant(s)  
Registration No. 42,425

Dated: November 15, 2004

**Eitan, Pearl, Latzer & Cohen Zedek, LLP**  
10 Rockefeller Plaza, Suite 1001  
New York, NY 10020  
Telephone: (212) 632-3494  
Fax: (212) 632-3489